EV DC Charging Station PFC Inductor (20–60 kW)

Product Design Reference | PMT-PR-2026-1112-13 | Rev A/0 | 2026-11-12

This reference reproduces published product information and its stated evidence status. Final project specifications require an approved drawing and sample acceptance record.

Published Parameters and Conditions

Parameter	Published value / interpretation
Power level:	20 kW - 60 kW (single module)
Operating frequency:	16 kHz - 50 kHz
Inductance:	200 µH - 500 µH
Cooling:	Air/Liquid

Application and Validation

Designed for EV DC charging station PFC circuits. Flat wire winding supports high power output with optional air/liquid cooling solutions, meeting 20–60 kW power level requirements.

A redacted 20 kW-class EV charger PFC-stage case has been prepared to show the engineering review path for ripple control, DCR review, magnetic loss, thermal path, insulation requirements, and mounting constraints. Final values are confirmed in the approved sample record for each project.

PROMAGTECH supports custom inductance, current rating, core material, insulation class, cooling method, and mounting structure based on your converter topology and application environment.

Selection and calculation notes for charging-station and industrial three-phase PFC inductors.

High-temperature, humidity and salt-spray considerations for charger magnetic components.

Insulation, partial-discharge and thermal review points for 800 V EV power platforms.

Conformal coating and potting are available as optional processes for outdoor energy storage, charging-station and industrial magnetic components. Selection depends on moisture exposure, insulation, thermal paths, material compatibility and serviceability. Project-specific environmental protection requires an agreed process and sample validation.

Project Review and Contact

Send voltage, topology, frequency, RMS and peak current, loaded inductance or turns ratio, thermal boundary, insulation and available mounting dimensions. Sample fees and delivery schedule are confirmed in the project quotation.

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Product page: https://www.promagtech.com/products/charging-pile-pfc.html

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